Using Small Unmanned Aerial Systems as Electronic Warfare Platforms - Providing the Tactical Ground Commander the Electromagnetic Advantage

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Using Small UAS as EW Platforms - Providing the Tactical Ground Commander the Electromagnetic Advantage

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CIRPAS Pelican Aircraft

DRFM Technology

- Phase B research will involve additional flight test at CIRPAS with a small UAS to collect data and investigate the following:

1) Results using 2 Mercury Defense DRMFs on additional flight test
2) Aircraft geodetic coordinates
3) Flight test results to study effectiveness of a photonic direction finding antenna architecture recently developed
4) Best practices of sending threat information around a swarm configuration
5) Test power requirements for each component in the swarm architecture

- Investigate design requirements of a system of small unmanned aerial systems (UAS) to be used as an electronic attack against ground based threat emitters.
- This is a continuation of work stated in FY15 (Phase 1), in which results were collected from a Pelican aircraft carrying one digital RF memory (DRFM) conducting an electronic attack signal against a ground based emitter.

- To develop additional electronic attack capabilities against enemy radar threats.
- This research provides operationally relevant thesis study for NPS students which is in keeping with the NPS mission of providing unique and advanced education and research programs to increase the combat effectiveness of commissioned officers of the Naval Service to enhance the security of the United States.

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